

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A coupling apparatus for data buses, comprising:—having

—_____—a first connecting device ~~(11)~~—for a first data bus ~~(F1)~~,;

_____—a second connecting device ~~(12)~~—for a second data bus ~~(F2)~~, ~~which is not the same as~~ as additional to the first connecting device,; and

_____—a data processing device ~~(13, 15)~~, ~~which is,~~ connected to the first and the second connecting device ~~(11, 12)~~ ~~in order~~ to allow data to be interchanged between the data buses ~~(F1, F2)~~,; and

~~characterized by~~

_____—a third connecting device ~~(14)~~, ~~which is likewise~~ connected to the data processing device ~~(13, 15)~~, for a third data bus ~~(P)~~, ~~which is not the same as~~ as additional to the first and second data buses, ~~so that~~ to allow data to ~~can~~ be interchanged between the three data buses ~~(F1, F2, P)~~.

2. (Currently Amended) The coupling apparatus as claimed in claim 1, ~~which~~ wherein the coupling apparatus is configurable.

3. (Currently Amended) The coupling apparatus as claimed in claim 2, wherein the coupling apparatus is configurable ~~which can be configured~~ in such a way that the data transfer between at least two ~~or three~~ of the data buses ~~(F1, F2, P)~~ ~~can be~~

~~controlled~~is controllable as a function of the semantics of the data to be transmitted.

4. (Currently Amended) The coupling apparatus as claimed in ~~one of the preceding claims~~claim 1, ~~wherein with~~ the first data bus ~~(F1) being~~is a Profibus.

5. (Currently Amended) The coupling apparatus as claimed in ~~one of the preceding claims~~claim 1, ~~wherein with~~ the second data bus ~~is~~(F2) being an AS-i bus.

6. (Currently Amended) The coupling apparatus as claimed in ~~one of the preceding claims, in which~~claim 1, wherein at least one of input and/or output modules (I3, O3) can be connected~~are connectable~~ to the third data bus ~~(P) and can be linked~~are linkable to at least one of ~~to~~ the first and/or the second data bus with the aid of the coupling apparatus ~~(1)~~.

7. (Currently Amended) The coupling apparatus as claimed in ~~one of the preceding claims, which has~~claim 1, including a monitor ~~(16) with~~ a configuration capability.

8. (New) The coupling apparatus as claimed in claim 2, wherein the first data bus is a Profibus.

9. (New) The coupling apparatus as claimed in claim 2, wherein the second data bus is an AS-i bus.

10. (New) The coupling apparatus as claimed in claim 3, wherein the first data bus is a Profibus.

11. (New) The coupling apparatus as claimed in claim 3, wherein the second data bus is an AS-i bus.

12. (New) The coupling apparatus as claimed in claim 4, wherein the second data bus is an AS-i bus.

13. (New) The coupling apparatus as claimed in claim 2, wherein input/output modules are connectable to the third data bus and are linkable to at least one of the first and the second data bus with the aid of the coupling apparatus.

14. (New) The coupling apparatus as claimed in claim 1, including a monitor with a configuration capability.